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ABSTRACT

This publication analyzes ways in which vocational teachers construct the content and purpose of vocational studies in comprehensive high schools. Data were gathered during a 3-year field study conducted in 5 comprehensive high schools. Findings suggest: (1) schools and teachers accommodate to an "academics first" policy, thereby compromising both academic education and work preparation; (2) an institutional dichotomy exists between college-bound and noncollege-bound students; (3) vocational offerings are valued by administrators and counselors to the extent that they appeal to academically unsuccessful students and relieve some of the burden on the school for remedial work in academic basic skills; (4) nonacademic teachers tend to preserve their jobs by accommodating those students who have the greatest difficulty in conventional academic classes, generally the limited English proficient, special education, and remedial students; (5) the five schools are a long way from proposed reform effort scenarios, which call for integration of academic and vocational education, bring to the fore fundamental questions surrounding the differentiated curriculum, and feed the debate regarding what is basic in the secondary curriculum. (LL)

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## THE COMPRESSED CURRICULUM: COMPROMISES OF PURPOSE AND CONTENT IN SECONDARY SCHOOLS

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# THE COMPRESSED CURRICULUM: COMPROMISES OF PURPOSE AND CONTENT IN SECONDARY SCHOOLS

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February 1992

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# THE COMPRESSED CURRICULUM:
# COMPROMISES OF PURPOSE AND CONTENT IN SECONDARY SCHOOLS

> Academics will support themselves.
> Academics is the kind of thing that parents want.
> Academics is supported by the college-university regents.
>
> Basically, that's what you go to school for,
> reading, writing, arithmetic.
> Whoever said reading, writing, arithmetic, and wood?
>
> [Roger Townsend, teacher]

Roger Townsend teaches drafting. Like his colleagues in other vocational departments, he lives in a world in which academics are the most prized subjects and academically successful students the most prized clientele. Whatever their love of their own subject, and however impassioned their insistence that practical competence be valued, vocational teachers are not immune to the institutional ethos that places academic achievement above practical accomplishments—and that regards them as separate endeavors. They recount the various ways in which academics take pride of place: in the official pronouncements of the school; in the subtle and not-so-subtle ways in which teachers are treated; in the allocation of time, space, and material resources. The competition with academics stands out as vocational teachers struggle to make their elective offerings "count" and as vocational departments struggle to win a sufficient share of school resources.

Secondary teachers have long considered subject affiliation to be a central feature of their teaching identity. Indeed, enduring stereotypes portray high school teachers as resolutely "subject-centered," presumably in contrast to their "child centered" colleagues who populate elementary school classrooms. Over the past decade observers of high schools have begun to penetrate the stereotype, uncovering the meanings that teachers attach to subject specialization and the way in which subject orientation and student orientation intersect. Most studies of subject affiliation center on the academic subjects; among them are Freema Elbaz's (1983) study of the English teacher "Sarah," Ball & Lacey's (1984) portrait of subject subcultures in four English departments, Bruckerhoff's (1991) analysis of the "coaches" and the "academics" in a social studies department, and Siskin's (1991) study of the core academic departments in three high schools.

This paper explores the ways in which vocational teachers construct the content and purpose of vocational studies in comprehensive high schools. Its central theme is compromise; its central argument is that the schools' and teachers' accommodations to an "academics first" policy compromise both academic education and work preparation. The paper employs data from a three-year field study in five comprehensive high schools in a single state. The schools differ from one another in crucial ways, but there remain certain commonalities in the way that non-academic teachers are positioned within them. The meaning of vocational studies is strikingly similar at large, suburban Oak Valley High School and its academically-oriented urban counterpart Onyx Ridge, at inner city Valley High School, and at ethnically and linguistically diverse Esperanza and Rancho high schools.

The focus on content perspectives among "non-academic" teachers has few precedents. The exceptions arise largely from studies of British comprehensive schools.

Patricia Sikes and her colleagues compared art and science teachers in British comprehensive schools, finding that the two groups differed not only in their views of subject, but also in their career experiences, career aspirations, and collegial affiliations (Sikes, Measor & Woods, 1985). Burgess (1983) devoted most of his analysis of Bishop McGregor School to the "Newsom Department," a department organized not by a specific subject discipline but by responsibilities for students considered "early school leavers."[1]

Comprehensive high schools in the U.S. provide a particular backdrop for this inquiry in which three features prove crucial. These five schools are first, in principle at any rate, comprehensive in their purposes, programs, and pupils. They offer to vocational teachers a professional environment that is categorically and dramatically different from that of specialized vocational centers, technical schools, or occupational high schools (for example, Mitchell, Russell, & Benson, 1989). In the comprehensive high schools we studied, work resides on the margins in two major ways. First, we were struck by the polarities between academic study and work that accompany the school's pervasive orientation toward college preparation. As a diverse and important enterprise in the larger society, work is nearly absent from the curriculum and goals of the high school. Teachers and administrators alike expressed relatively undeveloped conceptions of adult work and its relationship to academic learning. That is, everyone recognizes that academic study for the "college bound" is in some diffuse sense preparation for work, but the specifics of the relation are hardly evident in the curriculum or in the teaching priorities expressed by teachers. In effect, the problem of linking academic study to participation in adult work is, for the academically successful students and their teachers, removed to the domain of higher education (or beyond). At the same time, the few nominally work-oriented programs in the high school tend to center on specific technical skills, oriented toward entry level positions in a relatively narrow range of occupational arenas. In this respect, the designated "vocational" curriculum reinforces the sense that theory and practice, or academic study and work, are separate and differently valued enterprises.

Second, the curriculum of comprehensive high schools responds directly to the subject hierarchy of higher education. Vocational topics have long been considered "non-subjects," occupying marginal status in relation to what critics term the "hegemonic academic curriculum." (Connell, 1985; Burgess, 1983; Little, 1992). Academic privilege in these schools grew throughout the 1980s, when the thrust of reform was centered on "recapturing the school day for academics." (Toch, 1991, p. 100). Accordingly, resource allocation in comprehensive schools increasingly favors academic departments and "college bound" students. The pattern across the five schools shows a steady record of decline in total numbers and in full-time assignment of vocational specialists. There are fewer vocational teachers to form a coherent professional community, and fewer programs and courses that might be judged genuinely "vocational" in purpose and content.

Finally, comprehensive high schools remain targets of criticism and centers of controversy. The history of debates over secondary schooling, according to curriculum theorists, is reflected in the shifting composition of the high school curriculum (for example, Goodson & Ball, 1984; Goodson, 1988; Sizer, 1984, 1992; Powell, Farrar, & Cohen, 1985). Underlying those debates are competing assumptions and beliefs regarding the purposes of secondary education. Writ most broadly, as the habits of mind and the

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[1]An article titled "It's not a proper subject, it's just Newsom" (Burgess, 1984; see also Burgess, 1983) reflects the same phenomenon in Britain. "Newsom" refers to the program of vocational and other studies oriented to "early school leavers," the result of recommendations contained in the 1963 Newsom Report (Newsom, 1963, cited in Burgess, 1983).

technical capacities required by all mature adults to pursue good work, vocationalism compels widespread support. Organized as a residual component of the "shopping mall high school," however, vocational education competes only weakly for public regard and professional respect. The meaning that teachers attach to vocational "content" thus takes shape against a backdrop of comprehensive schooling, with its multiple and competing goals, its subject hierarchies and departmental organization, its asymmetrical support of academic and non-academic pursuits, and its present struggle over priorities.

## Conditions of Compromise

Vocational teachers' conception of subject is framed by four conditions of compromise. The first is a decline in the sheer presence of vocational studies in the high school—a steady decline in staffing, course offerings, and student enrollment. Two further conditions arise from this first. Vocational education serves as a "safety valve" in the comprehensive high school, a mechanism for preserving enrollment (forestalling dropout) among those who are not academically successful. Vocational subjects thus come to be seen as remedial subjects. In addition, vocational classes are used to absorb increasing numbers of students who have been designated as "limited-English speaking," "special education," or otherwise "at risk". In this manner, the content of vocational studies is dominated by "special needs" rather than by students' occupational interests. The result of these three conditions is a fourth—the absence of a student clientele in which vocational teachers might meaningfully invest their subject expertise and subject commitments.

### Steady decline in staffing, subjects, and students

Vocational teachers are a disappearing breed in these schools. Those who retire are not replaced. Those who remain increasingly preserve full-time teaching assignments by teaching part-time out of their primary subject area. By the third year of our study, ten of the 60 or so teachers who had been teaching vocational classes were teaching remedial classes in academic departments (basic math, for example) or courses in other non-academic departments (health or physical education). Others were teaching newly created electives that satisfy student interest without being visibly consistent with a departmental "vocational" orientation, such as multiple sections of Photography 1. Olive Roark, a business teacher, found herself assigned to teach classes in English as a Second Language (ESL): "It was indicated to me at the end of one school year that I might have to teach [ESL] and then they kept saying, 'Oh, no, things will be ok. You probably won't.' Until about the week before school started. And then they had given me four preps, two new ones with ESL students. ..."

The five schools vary considerably in their reliance on cross-over assignments, though all are constrained by the same set of state credentialing and teacher assignment regulations. Large, suburban Oak Valley High School is distinguished from the other schools by the large proportion of full-time membership in departments. Only four of the school's regular classroom teachers (or three percent) teach across departments—all of them members of the math department who also coach. Until recently, this same pattern of full-time specialist teaching also applied in the vocational departments. Now, Oak Valley's pattern has been disrupted by shifts in student enrollment and course requests, resulting in program cuts and split assignments for the industrial arts department. Of the six teachers affiliated with industrial arts in 1990-91, one teacher remains without a regular class

assignment altogether, while two others have been assigned to teach health or lower-level sections of math.

Onyx Ridge, in contrast, has a more extensive pattern of cross-department teaching that affects both the academic and vocational teachers. Eleven of Onyx Ridge's fifty regular classroom teachers (or twenty-two percent) were teaching across areas in 1989-90; of those, four were teachers of science, math, or English who spent the last period of the day coaching. The remaining seven were combining subject areas: math with industrial arts; English with art, business, music, health, or foreign language.

But the full nature and extent of cross-over teaching is difficult to detect. It is clearly evident in cases where course titles fall in traditional categories, as when drafting teacher Frank Leonard is shown to teach three periods of geometry. The problems of teacher (mis)assignment are far less clear in cases where the course title appears to lie within the major specialization of the teacher, but the course content has been altered. This is almost certainly the case in the "recordkeeping" course that is taught in one school's business department but is considered "about the lowest level math course the school has to offer."

A steady decline in vocational teaching staff is matched by a decline in the number of course offerings, and a shift in the types of courses available.[2] The curriculum of the vocational specializations, as recorded in course titles, is not recognizably "vocational." At the beginning of our study, all five of the schools offered fewer vocational courses than their staffing permitted. That is, teachers whose background and experience lay in industrial arts, business, agriculture, or home economics were teaching fewer than five periods a day in those areas. Over the three year period, all schools reduced the total number of offerings still further. The description offered by this industrial arts teacher typifies the developments in the five schools:

> Ten years ago ... We had six areas in our department that were teaching five periods, which is a normal load, plus we had two periods of auto shop in the morning before school, starting at 5:30 in the morning. We had ROP[3] Auto in the afternoon for two hours. We had ROP Small Engines one hour period in the morning. We had ROP Welding and Flame Cutting one period in the morning—this is all before school. So this was all outside of the school day and now we're contracted down the point that none of us are really teaching outside of the school day. ... And for next year, we've been told that we were essentially losing two teaching positions out of our department.

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[2] The parallel between staff reductions and program cuts may seem axiomatic, but in fact is not. In a case study report titled "Are core academics the dumping ground of teacher misassignment?," Gehrke and Sheffield (1985) observe that in times of declining enrollment, academic courses are maintained through shifts in teacher assignment, while courses requiring special technical skill (instrumental music, wood shop) are cut from the school program altogether.

[3] The Regional Occupational Program (ROP) is a state program administered by the state department of education and implemented through county offices. ROPs offer entry-level job training for local job markets, plus career exploration and preparation for higher education in a related skill. The program is open to students 16 and older. The state-funded salary support for ROP teachers enables comprehensive high schools to maintain a richer teacher-student ratio than they could otherwise support, or to avoid teacher layoffs as enrollments decline.

All of the various accommodations to decline—split assignments, a reduction in the number and sequence of vocational course offerings, and the use of vocational course titles to house instruction in remedial academics—shape the conditions for compromise of content and purpose.

### Vocational courses as remedial academics

Vocational courses have been modified to serve the purpose of remedial instruction in basic academic skills. By orienting a large share of course content to remedial work in English, science, or math, teachers are authorized to offer graduation credit for such courses. Six of the twenty-three sections we have labeled "vocational" in one school's business curriculum are in fact low-level math courses ("consumer math" and "business math"). These courses, despite their differing titles, are described by a business teacher has fundamentally the same: "Basically it's high school proficiency math. It's percents, decimals." A business teacher at another school creates a similar picture as she speaks of her two periods of business recordkeeping:

> My other two classes are two periods of recordkeeping, which are a low-level math ability student. A number of special ed students. ...It's real basic. It's how to balance your checkbook, how to write checks, how to make receipts, whole gamut of keeping records for different occupations. For bank tellers, for a cashier, how to prove cash at the end of the day in a cash register, all the way up to the end of the year where we do do a payroll and we do go through income taxes. But it's very basic and we're dealing with math abilities eighth grade and below, generally.

In our five schools, vocational education has come to be defined less as a means of offering students a coherent course of study leading to work than as a means of shoring up the margins of the academic curriculum. To be sure, one observes in almost any class some students who are fully engaged in the topics and materials at hand, and who are pursuing a course that they intend to lead to employment. But this is not the most common picture. In all of these schools, students who enroll in vocational classes have tended to be students who have not succeeded in academic coursework.

Vocational departments are not alone in contending with the wide diversity in students' academic and social development. Academic departments, too, must come to terms with low-achieving students and students who present special challenges. The policies within departments for assigning responsibility for those students vary widely, sometimes within the same school. In Oak Valley's English department, all teachers share responsibility for teaching "low" sections on a rotating basis. The aim, according to the department chair, is to move students out of those sections and into regular classes as quickly as possible. The science department in the same school has formally acclaimed similar responsibility for the low-achieving students. However, the department has consistently relied on seniority to make teaching assignments, with the result that the newest teachers have traditionally been assigned the lowest achieving classes, the youngest



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students, or the most "generic" courses.[4] The distinguishing feature in vocational education, however, is that for at least some vocational areas (especially industrial arts), the entire departmental program has come to be oriented toward "basic" levels of subject mastery. And when vocational teachers assume teaching responsibilities in academic areas, they again are asked to take the lowest achieving students and the most rudimentary elements of curriculum.

### Content shaped by students' "special needs"

At four of the five sites, veteran teachers have witnessed dramatic increases in the number of their students who present special needs of one sort or another. "If it wasn't for special ed kids and ESL kids," says one industrial arts teacher, " I probably wouldn't even have the three classes I have...This year I have two classes where probably a third of them are Spanish-speaking." Teachers tend to lump these two populations together, though they are arguably quite different in terms of their probable academic orientation and the demands they place on teachers' competence.

Policies favoring the mainstreaming of special education students are clearly evident in these classes, even at Oak Valley. Teachers are coping, some with more confidence and optimism than others. Josephine Raney, whose background combines home economics and business, teaches a Regional Occupational Program at Valley geared to special education students. Although she had no formal background in special education, she has embraced this assignment, and this group, with enthusiasm:

> It's very exciting. ... They need a lot of attention. You have to be a very patient person ...They need a lot of time. They need a lot of positive reinforcement. Sometimes they have a lot of negativism in our school with the students. ... So you have to do a lot of praising, give them a lot of love. It's just like your own kids and you kind of have to - sometimes you come in and you have to baby the whole class during the day. So it depends, you never know what your day is going to be like because you don't know what kind of attitudes they are coming in with.

Those vocational specialists whose identity and pride are most closely linked to a craft specialty are most disconcerted by the shift in student population. No longer are they able to teach a curriculum they have spent years honing. Irv Jackson, a vocational agriculture teacher, airs the frustration we have also heard from others. Unlike Josephine Raney, who "subbed in just about everything" before taking over her present program, Mr. Jackson's driving interest is agricultural education:

> I must have 15 special ed students. And I find out that a special ed teacher's not supposed to have more than 12. And I'm not even a special ed teacher. So what do they expect? They have people come into the class that can't speak English, students that can't read or write. They have students in here that are below 2.0 grade point average and I'm supposed to deal with that. And I'm not trained to

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[4]On the seniority factor in shaping teachers' instructional assignments and professional community, see Finley, 1984; Neufeld, 1984; and Little, in press.

do that. So I'm frustrated because I can't move along in my curriculum fast enough to cover my standards. And the good students in here—I have good students. You can see some of our accomplishments. I feel sorry for them. They're bored. "We heard this yesterday, Mr Jackson." Right, if I don't repeat it, I'm going to lose 10-15 people.

The increase in limited- and non-English speaking students is a consequence of the rapidly shifting demographics in the state's public schools. The population increases are outstripping districts' capacities to supply specialized programs and specially trained teachers. At Esperanza and Rancho, vocational teachers describe student placement patterns that they believe make vocational teachers disproportionately responsible for absorbing the increase. Although we do not have data on the distribution of limited- and non-English speaking students among academic and non-academic classes in these schools, a related study of student placement practices in three comprehensive high schools lends some support to the teachers' perceptions (Olsen, 1991). In Olsen's schools, content area teachers consistently excluded limited-English-speaking students from their classes through the mechanism of a "reclassification test" that relied heavily on writing.[5]

Some teachers seem quite sanguine about the increase in limited-English speaking students. Ed Gordon, an industrial arts teacher, is replenishing his high-school Spanish through contact with his students, and finds most of the recent immigrants eager learners. Others are concerned or frustrated. Roger Townsend offers this scenario of student placement practices that seem to settle for "holding" students rather than teaching them, and of teacher assignments made without regard to relevant teacher background:

They're trying to mainstream these kids that don't speak English.
Not caring one bit whether they cut off their fingers in metal shop.
Not caring whether they learn anything in the class,
as long as they've got the numbers.
I'm talking about a person who came into me last year and said,
"You're low on numbers, can you take some ESL kids in here?"

And I said, "This is drafting. What do you want me to teach them?
Are you going to give me an aide?"

"We don't have an aide."

"What should I do?"

"Well, can you hold them just for a while?"

And so I held them for nine weeks and I taught them—
I had math packets that I wrote up.
Nobody helped me with it, but I got math packets together and I said,

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[5]Olsen also reported that limited-English-speaking were sometimes prohibited from taking vocational classes on grounds of health and safety risks. Our own data suggest that non-English speaking students were more likely to be concentrated in business and home economics classes than in industrial arts shops, but that special education students might be assigned to any of the vocational areas. For a further discussion of student placement practices, see Selvin et. al. (1990).

"Ok, here's some math."

I would like to teach them drafting but they don't understand.
So I don't get an aide to help teach them drafting
and I was just in a holding pattern.
And then she comes in and says, "Can you take two more?"
Now that's not caring about what you're doing with kids.

Teachers find it disconcerting to be faced with students whose needs they do not understand and whose very presence may create new challenges ranging from classroom safety to effective instructional methods. Here, a teacher argues that placing limited- and non-English speaking students in business or other vocational classes does both them and the teachers a disservice:

> It has been the blind leading the blind. Taking a business teacher and putting them into two periods of ESL two days before school starts when they've never taught ESL before in their lives....They were notified like two or three days before school started. ... That does not bring up the kids' language acquisition if you have people who don't know what they're doing, you don't have text books, you're Xeroxing things day-by-day.

The concerns teachers express regarding the safety of limited- or non-English speaking students in shop or laboratory settings parallel those we heard in the case of special education students. Industrial arts teachers note that the aides who accompany special education students often know little or nothing about the equipment themselves, and thus only add to the classroom safety problems. Here, a home economics teacher details the problems she encounters with large numbers of Spanish-speaking students:

> I was very shocked when I had so many non-English speaking students. ...I'm not bellyaching, but I do see it as a real hazard...The other day we were cooking with butter and one kitchen [group] didn't understand that they were to put it in the microwave and they put this glass dish on the range. And because I was pretty alert, I saw that they had it there and went over and removed it before it became a fire.

Teachers are thereby presented with challenges to their pedagogical expertise. Many of the students who now populate their classrooms, according to teachers, are in some way or other difficult to teach. But their identity as vocational teachers is challenged in yet another way. A consequence of the push to academics, the corresponding reduction in non-academic electives, and the shift in student demographics is that vocational teachers do not have students who are recognizably dedicated to their areas of subject expertise.

### The missing "vocational" students

In some very real sense, these are teachers without students. That is, there are few or no students who are clearly dedicated to a vocational course of study. Xenia Young recalls her first days as a business teacher: "When I started... you had vocational students who were taking - you had someone who said 'I want to be a secretary or I want to be a bank teller.' And they took accounting and office machines and typing and shorthand and regular business curriculum. We don't do that any more."

When he taught at the Area Vocational Center, Roger Townsend had drafting students who were with him for several hours a day, several years in succession. He, like his colleagues in the academic departments, trace the satisfactions of teaching to a combination of "teaching a subject" and "getting to know kids."

> I was teaching kids to become drafters and designers and engineers. And as they came over to me they knew what they wanted to do in most cases. As they were there three hours every single day, I got to know them probably better than their parents....Those are the kinds of rewards. I had a student that came back last year and showed me a design that he did for a digital tire gauge and he gave me one as a present. He's at the state university now and finishing up his senior year in engineering. Those are the success stories that are neat, but those were the times when we taught subject matter.

Townsend's classes at Esperanza are now likely to be filled with students who "don't want to be there," those he professes are hardest to teach. Vocational teachers no longer expect to cultivate a cadre of students who pursue a coherent program of study over a period of years. The competition for student enrollment also places vocational teachers in conflict with the coordinators of work experience programs. Time that students spend in out-of-school job placements is credit-bearing time not spent in one or more of the regular course offerings in a vocational specialty. In one school, vocational teachers sought strict limitations on the amount of work experience time that any student could accrue.[6]

Teachers attribute much of their difficulty to restrictions on student choice at the high school level, but almost certainly there are other explanations for the "missing vocational student." In some instances, these programs may be suffering the effects of inflated "credential" demands; jobs that previously required only a high school diploma now are filled by candidates boasting at least two years of college work and a specialist degree (A.A.). Concentrated programs of vocational preparation are thereby shifted upward in the system. In other instances, the nature of locally available work no longer represents a close fit with what vocational teachers are prepared to offer in the high schools. A metal shop teacher reports:

> I've had a real close tie with AdvanceCo... They had a big machine shop and fabrication plant over here. That relationship's been real good, but I haven't done anything this year, because they're closing down their machine shop. ... They'll be just doing plastic injection molding mostly. ...I probably had twenty of my past students that work over there now. But that program has since been eliminated because of the close-down on the manufacturing end of it in the machine tool area.

Teachers are situated and given identity by their student clientele. Their satisfaction with their work, the sense of craft pride they derive from their subject expertise, and their sense of what is important in subject matter teaching are closely linked to the students they teach (Metz, in press). The vocational courses in each of our five schools were home

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[6] Ironically, the close connection between classroom-based work preparation and field-based work experience is at the heart of most progressive work education programs and of most proposals for reforms in work education. See Simon, Dippo, & Schenke (1991).

primarily to those students who, for a variety of reasons, were excluded from (or opted out of) what has termed the "competitive academic curriculum" of the comprehensive high school. (For extensive discussion of the "competitive academic curriculum" and its consequences, see Connell et al. (1983) and Connell (1985). As one teacher summed up: "If they're not college material, we get them." In the eyes of most teachers, the nature of students who are considered "not college material" has changed as schools have encouraged a greater range of students to aspire toward higher education. Most vocational teachers with whom we spoke described the students who fill their own classes as "nice kids" who are experiencing substantial difficulty in academic classes, oriented neither toward higher education nor a specific occupation, or hampered by special obstacles to learning that range from a limited command of spoken and written English to physical, mental, or emotional disabilities.

There were some notable exceptions. Graphics arts classes at Onyx Ridge High School, for example, attract students from a wide range of academic niches and levels in the school, from those enrolled in Advanced Placement classes to those who plan to join the military after high school. The teachers of early childhood education programs at Oak Valley and Onyx Ridge say they are reasonably successful at attracting students with a genuine interest in teaching young children. At Valley, which is home to a regional special education center, two Regional Occupational Programs specialize in preparing special education students for specific jobs in food service and industrial cleaning establishments. For those teachers, the program's aims and the student clientele achieve a fit. Many vocational teachers, however, explain that the courses they teach are designated as "low-level" classes aimed at supplying basic skills instruction to the school's lowest-achieving students. The "hands-on" orientation of most vocational classes is considered a vehicle for maintaining interest (and enrollment) of students not otherwise engaged by schoolwork.

Although the teachers hold mixed views about the ways that students are labeled and categorized, they are inescapably aware of the ways in which the most recent press toward academics has affected the pool of students they teach. That pool has been reduced in number and changed in character; the impression that vocational teachers are dwelling among "the low and the special" is so nearly uniform that the exceptions are almost startling. Whatever the contributing factors, the result seems clear enough to teachers: their students are only rarely "vocational" students in any traditional sense. Nor are their courses.

## Teaching the Compressed Curriculum

These are teachers not only without students, but also without curriculum. In all the schools, vocational course offerings have a decidedly fragmented look, with remnants of coherent and sequenced programs interspersed with general purpose electives. The college bound orientation on the one hand, and the press to develop remedial programs in the core academic subjects on the other, have diminished the time available for a meaningful sequence of courses in the vocational areas. The result is a curriculum that is compressed in several respects.

### Tenuous connections to work

For nearly a century America's comprehensive secondary schools have placed vocationalism among their principal goals. Reform groups have periodically invoked visions of the nation's waning economic vitality to rally support for their proposals. Most teachers justify their curriculum priorities in light of what students will need for the future. Many of these perceived needs are directly or indirectly vocational. Seen this way, the elite

boarding schools engaged in "preparing for power" are as distinctly vocational as an urban magnet school dedicated to the health occupations.[7] Yet we confront an institutional irony in comprehensive high schools. Broadly conceived as a preparation for productive adulthood, the vocational purposes of secondary schooling pervade these schools. Yet the curricula specifically and formally labeled as "vocational," and the teachers who offer them, have been viewed with a certain disdain or skepticism. By its critics, vocational education has been judged academically weak and occupationally inconsequential. In these five schools, the small numbers of specialist faculty and the steady reduction of course offerings add substance to such criticisms.

The first aspect of programmatic fragmentation is teachers' diminished sense of place and displaced sense of purpose. A teacher who sponsors the Future Business Leaders of America recalls how, in a previous time and place, she was able to oversee a program in which students participated both in classes and in the club, for different but related ends: "We used to learn the theory in class and then come to the club to learn the leadership skills and learn how to be involved in the community." But these dual purposes are obscured when students who join the club are no longer the same students who populate the classes. They "come [to the club] ... thinking they're going to learn some business theory, and that's not the purpose of the club." Further, she has trouble locating her club members during the school day because "they are not business students:"

> With my club, FBLA, the kids are supposed to be business kids. Well, they don't have time in their schedules to take business classes. So the kids who join the club basically are there to join a club. They want something on their transcript, and then once they get in the club and see some of the things we do, then they get kind of enthused. But they still are not business students. ... I have a real hard time finding the kids because they're not in our classes. If I want a message, I have to run and go find a kid.

And the Future Business Leaders of America, meanwhile, for those students who see the world of business largely through its lens, is thus curiously devoid of substantive content about business, except insofar as being in business entails involvement in a community. The sponsor has "shown videos on 'How to Handle a Job Interview,'" but the main activities are taken up with community service:

> We worked with the community on one of our "Oak Valley Days," ... we helped out the community with booths. ... We helped at Open House as ushers. We were the ones that sold at the football games, so we helped the school provide ticket sellers, but then they donated money back to us as a school service project. So we did that. We helped March of Dimes.

Few vocational teachers in these comprehensive schools foresee a stream of students flowing directly from their high school programs into the associated occupations or community college programs; estimates ranged from two to ten percent, although all teachers could cite individual success stories. Oak Valley's wood shop teacher says "I would like to think that any kid who left our program, that I could get him a job at woodworking, but that's not true, that's not true. As far as employment is concerned,

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[7]On the orientation of elite boarding schools, see Cookson & Persell (1985). On specialized occupation-oriented schools, see Mitchell, Russell, & Benson (1989)..

maybe each year I may have under five percent that would be going into a construction trade. That's not very many." In the industrial trades, the problem is exacerbated when the burden of finding job placements falls on individual teachers, who establish relationships one employer at a time.[8]

With the fragmentation of program, it becomes less tenable for teachers to claim that they are preparing students for work. In this regard, vocational teachers in comprehensive high schools distinguish their own circumstances from those enjoyed by teachers in schools, centers, or programs dedicated to vocational purposes. Edna Vickery distinguishes what she attempts in her home economics classes from what the area vocational center is organized to do. The area center, she claims, prepares students who "can usually step into a job in that area." Her own aims are explicitly not vocational, but are "geared to the homemaker role. You're going to get these skills and work in life. But you're not going to take necessarily these skills and go to a job." Conceptions of what it means to prepare "job-ready" students are narrowed:

> Those students who take one year of accounting, we would consider to have entry-level skills for bookkeeping and be job-ready. Typing I, Typing II, we would still encourage those students to go on to a word processing class....So that those students, then, who go on to the word processing classes, we would consider to be job-ready.

In sum, vocational education in comprehensive high schools is rendered less and less "vocational" by the splintering of vocational emphases in the curriculum. Meaningful connections between school-based preparation and the world of work are difficult to discover. The demarcation between "school knowledge" and everyday working knowledge is intensified. Although not the topic of this analysis, this problem is arguably one that extends to the academic curriculum as well (see Eckert, 1989; Lave, 1986).

### Short time and shallow subjects

Curricular depth and coherence is judged both by the emphases of individual courses and the relations between courses. Teachers consider curriculum depth and coherence to be jeopardized in two ways: first, by reducing the range of total offerings and concentrating on introductory courses; and second, by combining topics and levels within single course offerings. Sequenced elements of a program (Auto I, II, II and IV, for example) may be offered simultaneously as a way of maintaining adequate enrollment in individual class periods. To some extent, Valley remains an exception, aided in part by the two hour block schedule and more by a student population that has formed a traditional clientele for vocational programs. The auto shop instructor can describe a population of "advanced students" who have been with him two, three, or four years. He can describe a structured curriculum that he distinguishes from "the hobby shop idea," and a class schedule that includes one class reserved for advanced students. And as a criterion of his own success, he counts the number of students who go on to programs in the community colleges or to one of the auto industry's own specialist programs (last year the number was 4). Even so, the business teacher at the same school lists a mix of topics and levels in two of her five

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[8]This pattern of individual pursuits contrasts with some of the evolving "academy" models constructed around institutional agreements between a school and a group of potential employers, or among the school, trade unions, and employers (Grubb et al., 1991; Stern & Dayton, 1990).

class periods: "Let's see, first period I have computer applications and automated business procedures. Second period I have word processing, keyboarding I, keyboarding II, and keyboarding III."

Teachers would prefer to organize the curriculum and group the students in ways that permit them to concentrate on subject continuity and depth. Roger Townsend estimates that in his single drafting class "I probably have eight classes at the same time!" In contrast, he says, "I used to have the privilege of having an advanced class and I would take them individually. I would have a beginning class that would have all beginning people. Well, we don't have that luxury any more because of the requirements to graduate from high school. ... It's hard to get good at the subject with only one year of it."

A second form of the "compressed curriculum" consists of a narrowing of topics: fewer and shorter; not two, or four, semesters of study but one. Karen Eaton speaks of the compromises she makes in accommodating multiple instructional and curricular aims within one semester of her computer applications course:

> I'm trying to teach them Word Perfect, Lotus, D-Base. At the same time I'm trying to teach them grammar, you know, proper letter layout and the things that accompany that. You can't do that in one semester. The students mainly come in for one semester. They're supposed to have a pre-requisite of typing, but a lot of them do not. ... So, I have sort of a condensed version that goes for one semester in which we cover reports, business letters, and Word Perfect. We don't get any speed. I can't do it and teach Word Perfect. So I just dropped the keyboarding and I give them a few timed writings and I say "Ok, look you need to take keyboarding, you need to take keyboarding, otherwise you won't get a job in this field." And it's as simple as that.

The "compressed curriculum" theme is echoed by others in the department. One of Eaton's colleagues says: "I feel constrained in what I can do. At my previous school typing was a full year, so I felt like I was really reaching those kids. Here it's only one semester. Plus, in computers we have a prerequisite that they know typing, but it is not enforced. So we get kids in there who don't know how to type."

Finally, the time structure of the instructional day in three of the five schools makes it difficult for teachers to schedule the kinds of activities that place classroom learning in the broader context of work. At their best, vocational courses offer authentic practical contexts for learning of a sort rarely available in the secondary school curriculum. In three of the schools, vocational programs, like academic classes, are scheduled in fifty-minute periods. Valley employs a two-period block schedule for four days of the week, and Oak Valley for two. Even with the two hour blocks, the schedule at Valley still leaves the students in field-based Regional Occupation Programs gasping and the teachers worrying that their short daily stint on a work site is more of a burden to employers than a benefit. It hardly adds up to what learning theorists have recently termed "legitimate peripheral participation" as a means of successfully entering "communities of practice" (Lave and Wenger, 1991).

The tensions generated by curriculum compromises are ironically intensified in ROP classes. In one sense, the presence of ROP programs signals an occupational orientation in the departments that offer them. In most cases, they would appear to represent one part of a larger sequence of courses in a specific occupational area [especially where they are linked to state-supported agreements with local community colleges]. At Oak Valley, for example, the teacher who directs the ROP in fashion merchandizing also

teaches two periods of clothing and one period of interior design. For most students who enroll in these classes, however, the coherence is largely on paper. Students who enroll in the general courses do not necessarily enroll in the ROP, nor have students in ROP necessarily come from prior coursework in related subjects. ROP programs themselves have no prerequisites, and thus are populated by students with a wide range of skills and background. As one teacher characterized the criteria for enrolling in his program: "They have to be 16 and wear shoes." Student placement practices and criteria thus appear to result in very few instances in which a student can or does take a coherent sequence of courses, or engage in work experience linked to coursework, in ways that might persuasively lead to work.

Segmented courses, even if sequenced, serve to fragment and decontextualize essential working knowledge. This is not an area we set out to study, and we attempt no more here than sharing some of our own puzzlement. It is a puzzle centered on questions of what, in fact, is "basic" in the school curriculum. Lave and Wenger (1991) employ the construct of "legitimate peripheral participation" to describe the way in which learners—whether young people or adult newcomers—move gradually toward full participation in "communities-of-practice." They rely in part on four investigations of apprenticeship to develop and exemplify their central concept of legitimate peripheral participation. Despite differences in the contexts, content, form, and effectiveness of apprenticeship embodied by the four cases, each pursues learning in the context of real-world, socially situated practice. "Learning," or moving both cognitively and socially toward full participation, takes place in parts and stages, but always in the presence of the full configuration of practice. Learning does not consist only in mastering a sequenced set of technical skills but also in mastering the entire pattern of social practice and social relationship in which those skills assume meaning. Nor is the productive sequence of learning tasks—what is basic and what is more complex— evident out of context. One example may help clarify this last point. In each of the industrial trades programs we visited, students were expected to begin by demonstrating their mastery of simple tools and the operations performed with those tools; they then began to complete simple projects. In one example of craft apprenticeship summarized by Lave and Wenger, however, novice tailors began by doing the relatively simple finishing details work on completed garments. The authors describe the organization of learning opportunities this way:

> Learning processes do not merely reproduce the sequence of production processes. In fact, production steps are reversed, as apprentices begin by learning the finishing stages of producing a garment, go on to learn to sew it, and only later learn to cut it out. ...Reversing production steps has the effect of focusing apprentices' attention first on the broad outlines of garment construction as they handle garments while attaching buttons and hemming cuffs. Next, sewing turns their attention to the logic (order, orientation) by which different pieces are sewn together, which in turn explains why they are cut out as they are. Each step offers the unstated opportunity to consider how the previous step contributes to the present one. In addition, this ordering minimizes experiences of failure and especially of serious failure. (Lave and Wenger, 1991, p. 72; emphasis added; see also Lave, 1986)

Such descriptions of situated learning would strike a familiar chord among many of the vocational educators with whom we spoke in the five schools. Their discussions of preferred pedagogy coincide very closely with the discussions of optimal apprenticeship learning developed here. But almost none of these teachers would argue that vocational education in their schools is now organized in this manner. Most often, small-scale "hands-on" projects substitute for a more robust array of learning problems and

opportunities. At best, short-term intern placements with local employers, provided through Regional Occupation Program classes or work experience arrangements, provide students a small glimpse of actual work environments. For all of the reasons enumerated here—conceptions of the purposes of schooling, practices of student placement, the organization of school time and space, and others—vocational educators find themselves propelled toward a compromise with pedagogical principle.

Where learning occurs in the context of real-world production, of course, errors made by novices may prove costly in real-world economic terms. One might argue that the sequence of learning among the tailors, whatever its cognitive advantages, serves the more immediate function of limiting such costly errors. (A clumsily sewn button is more readily retrievable than badly cut trouser legs). But the argument for cognitive and social learning is also persuasive in this and similarly constructed conditions of apprenticeship. And it is precisely the problem of well-organized apprenticeship that proves most troublesome here. A case of apprenticeship in the meat-cutting trades, also summarized by Lave and Wenger based on work conducted by Marshall (1972), demonstrates that apprenticeship conditions are not necessarily constructed in ways that promote learning. The case of the butchers' apprenticeship may more closely approximate conditions of American workplace learning. In Marshall's case of a union-sponsored program culminating in a certificate, apprentices encountered consistent disparities between the content of the traditional trade school curriculum and the learning demands of the supermarket workplace. And in the workplace, cost-efficiency considerations prevailed over training considerations. Although apprentices understood, in a broad sense, that they had little command of the knowledge and skill displayed by experienced meat-cutters, their opportunities to observe or participate in a range of meat-cutting practices were few. As Marshall reports, "When he arrives at a store, an apprentice is trained to perform a task, usually working the automatic wrapping machine. If he handles this competently, he is kept there until another apprentice comes" (p. 42).

Opportunities to learn, in this instance, are limited by the social and technical organization of the work and by a physical organization of work space and equipment that makes observation of others' work difficult. Ironically, the opportunities to learn or opportunities to derive satisfaction from genuine accomplishments are limited not only for the newcomers, but also for the experienced workers. Marshall adds, "In this situation, not only apprentices but journeymen, too, seldom learn the full range of tasks once proper to their trade" (p. 46). In any event, it seems clear that program "declines" in vocational education might serve productively as the occasion to reconceive the relation between formal schooling and work, and to reconsider the nature of "opportunity to learn" in the secondary school.

### Teaching "out of subject"

The public's stake in a well-prepared teacher workforce is expressed through state policies governing teacher certification and through local policies regarding teacher hiring, placement, and evaluation. Over the past ten years, states have tightened controls over teacher assignment at the secondary level to reduce the incidence of "misassignment." Teacher assignment practices in the five schools we visited were consistent with present state law, though not always consistent with the state's intent to ensure thorough subject matter preparation.

The fit between teaching assignments and teachers' own preparation and preference proves a more complex matter than credentialing regulations or other placement policies can anticipate or accommodate. One's self-image as a teacher—or a "good teacher"—is

bolstered or diminished by the daily ebb and flow of the classroom. A teacher's competence and confidence are tested in the moment-by-moment exchanges among individuals and in the dynamics of specific classes. In a five period teaching day, teachers readily distinguish between the "good" classes and the "tough" ones. It is not uncommon for teachers to experience widely fluctuating levels of success and satisfaction from one class to another. Indeed, the variance in measured levels of performance efficacy is nearly as great within teacher (across classes) as between teachers.[9]

Fragmentation in program manifests itself in the teaching schedule of individual teachers. Encompassed in the conception of "load" are the pragmatics of teacher assignment: the number of preps, the type of out-of-class preparation in the form of lesson planning or the organization of materials, and grading or other evaluation of student work. Fragmented teaching schedules exacerbate workload stresses in two ways. First, they magnify the burdens on planning and preparation. These districts all include in their collective bargaining agreements the number of acceptable "preps" for secondary teachers. The experiential reality can be quite different from the contract specifications. A business teacher tells us, for example, "Our vice principal in charge of curriculum doesn't believe a sheltered [non-English speaking] class is a different prep than a regular class." Here is her daily schedule:

> First [is] a before-school period.
> Second period I have recordkeeping which is sheltered and is all Hispanics.
> Third period I have accounting 1-2 and accounting 3-4.
> Fourth period I have what we call Math A,
> which is the class that is taking the place of
> introduction to algebra.
> Fifth is my prep,
> sixth is contact, and
> seventh is math A again.
> Eighth period I have Spirit,
> and that runs until Mondays 3:00,
> Tuesdays 4:00, Wednesdays 5:00
> and Thursdays and Fridays until the game's over.

But there is also "work load" in the sense of the interactional demands felt in classroom encounters with more than 100 students each day. Teachers assess their teaching schedule in part by the emotional tenor of their relations with students, the ease with which a satisfying relationship is formed or a sense of "teaching well" is achieved. Workload is expressed in terms of how "tough" it is to teach any particular class, or a specific combination of classes. Split assignments make it harder for a teacher to have a sense of being part of something coherent and meaningful, with students or with fellow teachers. Teachers believe that their genuine interests in their subject matter and their commitments to students are thwarted by assignment practices that make poor use of their experience and expertise.

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[9]Raudenbush, Rowan and Cheong (1990) report that variation among teacher ratings of perceived success by class vary nearly as much across the five classes taught by a teacher as across teachers (43% of class-level variance is intra-teacher variation, and 57% is inter-teacher variation).

For some teachers, mixed teaching assignments no doubt serve as a valued source of intellectual stimulation and variety. Frank Leonard likes teaching both drafting and geometry "because it's enough variety—it's enough of a switch so that it makes both areas fresh for me." For others, like wood shop teacher George Sanford, a split assignment is less satisfying. Sanford also teaches three periods of math, but does not enjoy the same depth of knowledge in mathematics that he does in cabinetry; nor does he gain the same emotional and aesthetic pleasure from math. He teaches differently, he says, though he does not elaborate on what that means. Others who have studied comparable situations report that teachers who are ill prepared for the subject they are assigned to teach tend to place greater reliance on textbooks, offer a narrower range of examples and explanations, substitute affective and social goals for academic goals, and display less genuine comfort in their teaching (see, for example, Sedlak et al., 1986, pp. 100-101; and Ball & Lacey, 1984, p. 236).

Quite apart from matters of appropriate credentialing, teachers may acquire assignments that are only tangentially related to what they consider to be the strong suits of their own professional background and a good fit with their personal preferences. Questions of appropriate fit center around both subject matter preparation (and affinities) and around teachers' comfort and compatibility with the students they encounter on a daily basis.

> While some individual background factors seem to make a difference, an important source of variation in teachers' sense of efficacy is their class assignments ... [S]urvey data on teachers' ratings of the extent of success they feel with particular classes suggests that high school teachers' sense of efficacy can and does fluctuate over classes in the course of a day according to the students' achievement level and engagement and the teachers' sense of preparation to teach the class.(McLaughlin, Talbert & Phelan, 1990: 10-11, emphasis in original).

Among the vocational teachers we met, we did find instances of a truly congenial fit. Of the teachers interviewed for this study, about one-fifth express nearly total enthusiasm for the courses and students they now teach. Olivia Henry, for example, chronicles the evolution of the program in early childhood education that now gives her satisfaction. Mr. Fuhrmann is equally pleased with his graphic arts program, and Greta Royce with her child development program. Tom Lawrence worries about the changes affecting his department, but continues to offer a full complement of auto shop classes. The two teachers at Valley High School specializing in ROP classes for special education students seem very much content with the niche they have found.

The situational nature of fit is captured in the responses of two vocational teachers assigned to teach courses in lower level math. Sam Lennard teaches business law, business math, and typing. He takes pleasure in his Business Law class, which draws "a full cross-section" of students, but claims he would "quit tomorrow" if he were assigned a full schedule of Business Math. [Even coaching, which drew Sam into teaching in the first place and which he loves, would not be enough to hold him in teaching if he taught only math.] Part of the difficulty is Sam's own lack of interest in math as a subject; and part is what he considers to be an unrewarding experience of teaching "the people the math department just rejected."

> Business Math is combat duty! These are the people the math department just rejected and every day I walk in there, it's go-to-war! I mean, if I give them homework, they're not going to do it, so we have to use all of our time in class on task. And it's a



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> comedy! I do soft-shoe, I do a little song and dance, I do anything to get them to study math! Anything I can think of! And I tell you, it takes a coach to teach business math!

Sam Lennard is not unaware of the effect that teachers' own lack of subject matter interest and confidence has on students: "150 students a year could be turned off to math. That ought to be addressed."

Emily Hunter, whose academic background includes a major in business education and a minor in English, presents a contrast case. She now teaches two periods of "Math A," a course for students who have been designated as unprepared for algebra, but who have not been consigned to the even lower-level courses (such as Beth Elgar's "recordkeeping" class or Sam Lennard's business math). The fact that she is content with her assignment may have partly to do with her status as a participant in a special project, and the support she receives from one of the math department's best teachers.

> [Math A] is a new program for the state that uses no textbooks and we are learning as we go through workshops what to do. We are being given the materials. We were given - our district went out and bought all the manipulatives that are needed for the class and so it's all done with manipulatives. I have 35 scientific calculators and tons of things to do things with so we're just kind of plodding along, because we're just learning how to do this.

In assessing subject matter fit, teachers speak of three related but distinct aspects of subject matter preparation. The first is formal preparation and an adequate command of subject matter knowledge; does the teacher know the subject well enough to teach it? This is the dimension that Olivia Henry stresses when she compares her own background in early childhood education with those who have "never taught preschool." Depth of subject matter knowledge is what Roger Townsend invokes when he says, "I started here and I had three drafting classes which is my strong suit--teaching drafting. Drafting is what I do! Is what I've done! And I can make it an interesting class because I also did it for a living for a while."

Subject matter fit may be compromised when staff reductions generate "bumping" of less senior teachers by their longer-tenured colleagues. Emily Hunter's "very favorite thing" is to teach accounting. But "our department is declining and if somebody is going to have to be bumped out, it was just as easily going to be me." To avoid being bumped, Emily drew upon her recently accumulated hours in math to claim qualifications in lower level math courses:

> I started taking math classes because my daughter was not doing well in math. So I started taking math classes and math has always been a class that just terrifies me. I have never felt secure in it. And so I took Algebra 1/2 and I got an A. Took Algebra 3/4 and I got an A. I took Geometry, I got a B in that. I got a C in trigonometry and I figured if I'm going to go any further I have got to go back and regroup and . . . feel more comfortable again.... I can probably teach Algebra 1/2, but no higher. I wouldn't even really ask to teach 1/2. I'm happy where I am. And I come to these kids with a different perspective on math because math has been a hard subject for me.

Emily Hunter appears relatively sanguine about her capacity to teach mathematics to children who have failed in math before—perhaps because of the assistance she receives as a participant in a specially funded program. Most critics of crossover assignments would

not share her sense of comfort. Toch (1991), among others, charges that seniority provisions, together with weakly constructed teacher assignment and certification policies and practices, are combining to place unprepared or underprepared teachers in academic classrooms. Further, such teachers are most likely to be found in the lowest-ranking courses with the lowest achieving students—those who, by many accounts, deserve the best of teaching and the firmest command of subject matter knowledge.

The second aspect of fit is teachers' sheer liking for the subject(s) they teach. Townsend's enthusiasm for drafting permeates his talk, while Sam Lessard's dislike of math is equally evident. It is true that subject competence and subject preference are in some way intertwined, but they do not not entirely coincide. A teacher assigned to the social studies department may trudge through an economics course, staying close to the textbook, yet come alive in a world history class the next period. Similarly, a teacher with a college major in industrial arts education will have taken coursework in several of the industrial trades, but is likely to feel genuine affinity for only one or two.

Finally, preparation for specific assignments requires that teachers' affinity for the subject must extend to an enthusiasm for teaching the subject to a particular population of students, and, over time, must yield a sense that one's efforts to teach the subject are repaid. Roger Townsend enumerates frustrations that begin with being denied the satisfactions of one's subject expertise, and extend to the irritations that come with students' and administrators' disregard for one's work:

> Ed Gordon likes making furniture. I like drawing. I like making things, working with my hands. We like doing it, but we're not getting satisfaction. I get a lot of satisfaction out of the kids when they do it. But I don't get satisfaction out of the kids when they don't want to do it. ....I hate people that don't respect the equipment that we have and don't respect the opportunities that we have. I dislike people that make decisions when they never come in. Nobody ever comes in to see my program.

Some classes are more satisfying than others. Edna Vickery distinguishes the close relationship that develops with her students in the American Family course from the cavalier way she feels treated by students in her foods classes:

> In Foods, it's for the day and get the hell out. Eat it and get the hell out. And clothing can be the same way. And in American Family, it's a [relationship-]building kind of thing. I mean, I don't think I could build a relationship with these kids in Foods. They just come in with a different attitude entirely. ...The subject makes it different.

In the face of teaching assignments that represent a poor fit place demands on teachers' knowledge, skill, and confidence, teachers' reactions range from confidence to resignation to frustrated resentment or helplessness. The teacher who instructs special education students in three industrial cleaning ROPs is a case of optimism. She had no formal preparation for work with a special education population, but finds it a natural and rewarding fit for her:

> I had just come in. I had never worked with special kids before. I had thought about it. I had even called up State, because I was thinking about going back and working on a master's. And I thought about doing it in special ed, but I never got around to doing it. So I got this class and there they were. I was kind of thrown into

> it. It was just like a part of me, it wasn't hard to get into it at all. I really love it. It's like I have a whole new family. It's another family for me. It's natural for me. It's just natural.

Other teachers tell tales of the defeat and frustration they experience when asked to teach in situations that overwhelm their knowledge and diminish their confidence. When Olive Roark was first assigned to teach three periods of ESL English, she wrote on the back of her survey for that year: "I consider my main area of teaching Business. I am confident and a great teacher here [in Business]. My ESL classes are being taught for the first time. I found out the week before school started. I had what everyone said was a poor text, no course outline to follow, no supplementary materials, and no knowledge of how to teach it."

## Redefining Vocational Subjects and Purposes

These various forms of curriculum compression result in a steady press to redefine the "vocational" nature of vocational classes. Vic Cameron, teaching graphics at Valley High School, labels his program of study "basic," an "exposure class." "It's not vocational," he says. Teachers say they have cultivated a "realistic" sense of what can be accomplished with the limited course offerings. One wood shop teacher explains, "We're exploratory with a little of the vocational career mixed in." Wood shop is an "avocational set-up:" "Kid could come in and ...make a couple of projects and take them home." Another agrees: "I look at what I teach as a stepping stone. I don't see it as an end in itself. Not every kid I have in my class is going to be a cabinet maker, but it's skill that they can sure take with them and build on something else. I give them basic knowledge of tools and you need that area in every single trade."

When discussing their priorities,vocational teachers talk less about the occupational aspects of their curricula than about the "practical." Auto shop teachers say that they prepare students not only—or primarily—to work in the auto industry, but also to maintain their own cars. Home economics teachers prepare students for work in fashion merchandizing, early childhood education, or restaurant management, but they also prepare astute consumers and informed parents. Wood shop teachers concentrate on basic home maintenance skills or facility with tools. Virtually all of these teachers invoked "preparation for life," "life skills," or an image of the "informed consumer" as a way of describing the contributions they made to student learning. The auto shop teacher at Oak Valley describes Auto I in this fashion:

> Auto I is just, here's a little bit about the owner-operator, you know. So they can be a good consumer, how to buy cars and parts, be able to maintain your car, change tires, those kinds of things. Which they used to know but now they don't. At the Auto II level I'm trying to interest them a little more about careers, getting them prepared for some vocational. Usually the vocational classes don't exist. They're on paper... .

The conventional goal of preparing students for specific occupations thus turns out to be a rather crude proxy for the domain that vocational teachers actually carve out among the various purposes of secondary schooling. Although these teachers (especially those in industrial arts, business, and agriculture) do emphasize the "saleable skills" they introduce, they also disagree among themselves about the appropriate nature and extent of skill

training in comprehensive high schools. Here, auto shop teacher Elmer Young describes his dispute with a colleague in another high school:

> There's a philosophical difference between Sam and I. And the philosophical difference is that he emphasizes teaching auto to people who want to be mechanics. And my philosophy has been that this isn't the place for skill-training because we have 50 minute classes.... I would rather teach the class so that I could raise the level of everybody's auto knowledge so they can work on their own car if they choose to or be a better consumer. ...The underlying philosophy is it's for everybody.
>
> Over there [Sam] convinced the administration to have two-hour blocks and he had the students in there and he had twenty crank-shafts and they were measuring the crank shaft and going through an elaborate evaluation like you would if you were an automotive machinist. Now most mechanics don't even bother with crank shafts, they send them out to a shop. They do the assembly and the disassembly and the cleaning, but they send the machine work out and I don't see the value of teaching an intensive skill like that.

In these comprehensive high schools, we found more instances of Mr. Young than his colleague Sam. Most teachers, echoing the principles of the manual training movement of decades past, and of present advocates of integrated academic and vocational education, contend that all students would benefit from the concepts and skills their courses offer. A wood shop teacher scoffs at the helplessness with which many college-educated adults greet basic mechanical tasks: "They have to pay people like me to do the simplest things."

Teachers' broad "practical" view takes two forms. First, it can be seen in the way individual teachers adjust the content of traditional vocational courses to accommodate a range of curricular aims. Olivia Henry, chair of the consumer/family studies department in a large suburban high school, is insistent about providing appropriate preparation for positions in child care occupations. But she also asserts that the main virtue of her program may be its preparation for parenting. She says:

> A better understanding of the child development process...would cure a lot of ills! And how children learn. And it can transform them into the field of teaching or just being able to select the best possible program for their own children. If the Regional Occupation Program [administrators] were to ask me, [preparing them for a job] is what I would say! And I feel I am preparing them for that. But I am realistic enough to know they're not all going to go into it.

The broad practical orientation is evident also in the entire configuration of courses offered by departments. In Olivia Henry's department, we find a combination of courses that signal potential vocational interests (fashion merchandizing, for example), together with general electives that rely upon a life skills orientation ("Single Survival" or "Foods for Two"). This mixed pattern of vocational courses and general-interest electives is characteristic of half of the mainstream vocational departments we studied, and occurs with some regularity in four of the five schools.

In their campaign for legitimacy, vocational teachers argue for the intrinsic value of a "practical" curriculum for all students. The virtues of the industrial or practical arts, they maintain, are undermined by the prevailing structure of university admission requirements

and by graduation requirements that press students and counselors toward courses that grant academic credit. Throughout our three years' field work, vocational teachers returned again and again to the conservative force of the university admission requirements, arguing that they inhibit curriculum innovation and constrain student choice. The requirements to which they refer specify coursework requirements in U.S. history, English, mathematics, laboratory science, foreign language, and other "college preparatory electives" that may include visual and performing arts (but not practical arts or other courses typically encompassed under the heading of vocational education). Note that these vocational teachers do not dispute whether all young people should be academically capable, but rather whether intellectual rigor should be equated with or reserved for a college preparatory curriculum, and whether technical and mechanical capacities should be equated with and reserved for those not likely to attend college.

Vocational teachers themselves seem doubtful that they will be successful in establishing their courses among the basics required for high school graduation or college admission. The university admission requirements leave little room or incentive for electives considered "non-academic." Further, the "basics for all" argument stands in marked contrast to realities of student placement that make vocational classes "a refuge for the slow learner." Present high school graduation requirements and university admission requirements make it unlikely that enrollment in conventional vocational classes will increase measurably. One teacher speaks for many:

> It hasn't helped, increasing the graduation requirements. Not that I'm totally against that, but I just wish that maybe we could count for something. I think it would make a difference. Even if the kid goes on to college—and I know it's a small percentage and I don't believe their statistics, not for a minute—but anyway, you still need something to get you through college. So if you can pick up some sort of skill like I did—I knew how to teach pre-school—you can go on to bigger and better things, even director, owner, manager, in a college program, whatever. But you're at least getting your basic skills somewhere in high school.

But among college aspirants or those who counsel them about course selection, "picking up a skill" does not compete well with other priorities, such as picking up another year of a foreign language, or an additional English course, or a fourth year of science. It is this reality, one that teachers both acknowledge and disparage, that leads them to pursue the second form of campaign to secure their programs and establish the legitimacy of their aims. Although they frequently chafe at being treated as a "dumping ground" for students rejected by the academic teachers, they steadfastly lay claim to a programmatic niche dedicated to students who seem unlikely to enter a four-year college or university immediately following high school. When Ed Gordon complained that vocational education is suffering an "erosion of dignity," he included students among those damaged by the tendency to value only to those headed for college:

> We have eighty percent of the kids in this school who will not go to college. And the more skills they have, the better employment they'll have. And yet we don't give that eighty percent any dignity. We have everything directed toward the college goal and college attainment. And anything that's resembling vocational skills, be it business or industrial arts or home ec or anything like that, it's just a fill-in. It doesn't really count.

Teaching a curriculum that "doesn't really count" to students who "don't fit" the dominant ethos of the school presents substantial challenges to teachers, diminishing the opportunities they find to display their subject expertise or to derive satisfaction from students' subject mastery.

## Conclusion

It is one of the ironies of the past decade's reforms that vocational purposes and programs enjoy only marginal status in comprehensive high schools at a time when reform movements are propelled by the spectre of diminishing economic productivity and national competitiveness. There is little that is distinctly or exclusively "vocational" about the goals that most of the vocational teachers espouse, the pattern of courses in most vocational departments, or the logic governing student placement in vocational classes. The purposes and priorities of these schools tend to be ordered in ways that concentrate symbolic acclaim and material resources on the academic curriculum—or more precisely, on the college-bound students, their courses, and their teachers. An institutional distinction between the "college-bound" and the "non college bound" student permeates these schools in a manner that reinforces long-standing dichotomies between theory and practice, and between intellectual and practical endeavors.

Vocational offerings are valued by administrators and counselors to the extent that they appeal successfully to academically unsuccessful students, and to the extent that they relieve some of the burden on the school for remedial work in academic basic skills (particularly math). We found the purposes, programs, and people specifically designated as "vocational" thus occupying a marginal but crucial place in the status hierarchy of the comprehensive high school. Certainly there were individual exceptions, but the prevailing pattern was clear.

The present configuration of staffing, course offerings, and student placement establish the conditions of compromise. The goals of genuine "work education" are eroded, as the explicit aims of vocational courses are subsumed by other purposes and other dynamics, mostly having to do with responses to academically marginal students. Only the most tenuous connection with work is apparent, and only the most superficial subject mastery made possible, in the reduced and fragmented vocational course offerings, the split teaching assignments, and the isolated general purpose electives (e.g., independent living, or photography).

Vocational teachers express a conception of subject and purpose shaped by these prevailing conditions. In this environment, vocational teachers find their niche (and preserve their jobs) by accommodating those students who have the greatest difficulty in conventional academic classes—generally the limited-English speaking, special education, and remedial students. But these are not "vocational" students, in any meaningful sense. Not surprisingly, then, vocational teachers dwell less and less often on purposes that are characteristically vocational.

What we see in these five schools lies some considerable distance from proposed scenarios for integrating academic and vocational education, or redesigning the American high school. Such scenarios bring to the foreground fundamental questions surrounding the differentiated curriculum, and feed the debates regarding what we consider "basic" in the secondary school curriculum. They require that administrators, teachers, and others envision an altered conception of the academic curriculum, the meaningful intersection of

academic and practical experience, and the relation between the school and the larger community. It is the impetus toward such a conception that this analysis is intended to serve.

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